

Hiroshi ISHIHARA, S.N. 10/625,111
Page 2

Dkt. No. 2271/69885

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) ~~An image processing apparatus which sequentially processes graphic rendering instructions for image data, said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data representing a second original image to render a second output image, said first original image being overlaid by said second original image, said image processing apparatus comprising:~~

~~an overlay detector configured to perform an overlay detection to detect an overlay of the first and second original images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and~~

~~a memory storing the first rendering data contained in the first graphic rendering instruction,~~

wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

wherein the overlay detector specifies a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the original images, in which

Hiroshi ISHIHARA, S.N. 10/625,111
Page 3

Dkt. No. 2271/69885

the specified portion of the first original image is deleted and stores the second rendering data into the memory.

2. (original) The image processing apparatus as defined in Claim 1, wherein said graphic rendering instructions are configured to be a page description language and each of said graphic rendering instructions are configured to include a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

3. (original) The image processing apparatus as defined in Claim 1, wherein said graphic rendering instructions are configured to be converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 4-7 (canceled).

8. (original) The image processing apparatus as defined in Claim 1, wherein the second output image is configured to be overwritten on the third output image.

9. (original) The image processing apparatus as claimed in Claim 8, wherein the first and second output image are configured to be drawn with a rendering process based on at least one of a mono chrome, an RGB video color rendering, and a CMYK paint color rendering.

10. (currently amended) An image processing apparatus ~~which sequentially processes~~

Hiroshi ISHIHARA, S.N. 10/625,111
Page 4

Dkt. No. 2271/69885

~~graphic rendering instructions for image data, said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data representing a second original image to render a second output image, said first original image being overlaid by said second original image, said image processing apparatus comprising:~~

overlay detecting means for performing an overlay detection to detect an overlay of the first and second original images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and

a memory storing the first rendering data contained in the first graphic rendering instruction,

wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

wherein the overlay detecting means detects a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the first original image, in which the specified portion of the first original image is deleted and stores the second rendering data into the memory.

11. (original) The image processing apparatus as defined in Claim 10, wherein said graphic rendering instructions are a page description language and each of said graphic rendering

Hiroshi ISHIHARA, S.N. 10/625,111
Page 5

Dkt. No. 2271/69885

instructions includes a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

12. (original) The image processing apparatus as defined in Claim 10, wherein said graphic rendering instructions are converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 13-16 (canceled).

17. (original) The image processing apparatus as defined in Claim 10, wherein the second output image is overwritten in the third output image.

18. (original) The image processing apparatus as claimed in Claim 15, wherein the first and second output image are drawn with a rendering process based on at least one of a mono chrome, an RGB video color rendering, and a CMYK paint color rendering.

19. (currently amended) An image processing method ~~which sequentially processes graphic rendering instructions for image data, said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data~~

Hiroshi ISHIHARA, S.N. 10/625,111
Page 6

Dkt. No. 2271/69885

~~representing a second original image to render a second output image, said first original image being overlaid by said second original image, said image processing method comprising the steps of:~~

performing an overlay detection to detect an overlay of the first and second images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and

storing the first rendering data contained in the first graphic rendering instruction, wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

wherein the overlay detecting methods specifies a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the first original image, in which the specified portion of the first original image is deleted and stores the second rendering data into the memory.

20. (original) The image processing method as defined in Claim 19, wherein said graphic rendering instructions are a page description language and each of said graphic rendering instructions includes a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

21. (original) The image processing method as defined in Claim 19, wherein said

Hiroshi ISHIHARA, S.N. 10/625,111
Page 7

Dkt. No. 2271/69885

graphic rendering instructions are converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 22-25 (canceled).

26. (original) The image processing method as defined in Claim 19, wherein the second output image is overwritten in the third output image.

27. (original) The image processing method as claimed in Claim 24, wherein the first and second output image are drawn with a rendering process based on at least one of a mono chrome, an RGB video color rendering, and a CMYK paint color rendering.

28. (currently amended) A printing apparatus ~~which sequentially processes graphic rendering instructions for image data, said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data representing a second original image to render a second output image, said original first image being overlaid by said second original image, said printing apparatus comprising:~~

overlay detecting means for performing an overlay detection to detect an overlay of the first and second original images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and

Hiroshi ISHIHARA, S.N. 10/625,111
Page 8

Dkt. No. 2271/69885

a memory storing the first rendering data contained in the first graphic rendering instruction,

wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

wherein the overlay detecting means specifies a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the first original image, in which the specified portion of the first original image is deleted and stores the second rendering data into the memory.

29. (original) The printing apparatus as defined in Claim 28, wherein said graphic rendering instructions are a page description language and each of said graphic rendering instructions includes a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

30. (original) The printing apparatus as defined in Claim 28, wherein said graphic rendering instructions are converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 31-34 (canceled).

Hiroshi ISHIHARA, S.N. 10/625,111
Page 9

Dkt. No. 2271/69885

35. (original) The printing apparatus as defined in Claim 28, wherein the second output image is overwritten in the third output image.

36. (original) The printing apparatus as claimed in Claim 33, wherein the first and second output image are drawn with a rendering process based on at least one of a mono chrome, an RGB video color rendering, and a CMYK paint color rendering.

37. (currently amended) A host PC which sequentially processes graphic rendering instructions for image data, ~~said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data representing a second original image to render a second output image, said first original image being overlaid by said second original image,~~ said host PC comprising:

overlay detecting means for performing an overlay detection to detect an overlay of the first and second original images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and

a memory storing the first rendering data contained in the first graphic rendering instruction,

wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

Hiroshi ISHIHARA, S.N. 10/625,111
Page 10

Dkt. No. 2271/69885

wherein the overlay detecting means specifies a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the first original image, in which the specified portion of the first original image is deleted and stores the second rendering data into the memory.

38. (original) The host PC as defined in Claim 37, wherein said graphic rendering instructions are a page description language and each of said graphic rendering instructions includes a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

39. (original) The host PC as defined in Claim 37, wherein said graphic rendering instructions are converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 40-43 (canceled).

44. (original) The host PC as defined in Claim 37, wherein the second output image is overwritten in the third output image.

45. (original) The host PC as claimed in Claim 42, wherein the first and second output image are drawn with a rendering process based on at least one of a mono chrome, an RGB video

Hiroshi ISHIIHARA, S.N. 10/625,111
Page 11

Dkt. No. 2271/69885

color rendering, and a CMYK paint color rendering.

46. (currently amended) An image forming apparatus ~~which sequentially processes graphic rendering instructions for image data, said graphic rendering instructions including first and second graphic rendering instructions, said first graphic rendering instruction being input immediately preceding said second graphic rendering instruction, said first graphic rendering instruction containing first rendering data representing a first original image to render a first output image, said second graphic rendering instruction containing second rendering data representing a second original image to render a second output image, said first original image being overlaid by said second original image, said image forming apparatus comprising:~~

overlay detecting means for performing an overlay detection to detect an overlay of the first and second original images which are rendered based on the first and second rendering data by the first and second graphic rendering instructions, respectively; and

a memory storing the first rendering data contained in the first graphic rendering instruction,

wherein said first and second graphic rendering instructions are sequentially processed, and said first graphic rendering instruction is input immediately preceding said second graphic rendering instruction, and

wherein the overlay detecting means specifies a portion of the first original image to be overlaid by the second original image upon detecting an overlay of the first and second original images, deletes a specified portion and draws a third output image, based on the first original image, in which the specified portion of the first original image is deleted and stores the second rendering data into the memory.

Hiroshi ISHIMARA, S.N. 10/625,111
Page 12

Dkt. No. 2271/69885

47. (original) The image forming apparatus as defined in Claim 46, wherein said graphic rendering instructions are a page description language and each of said graphic rendering instructions includes a fundamental graphic description instruction which handles characters, graphics and images and a rendering attribute instruction handling colors, clipping area designations and rendering arithmetic methods.

48. (original) The image forming apparatus as defined in Claim 46, wherein said graphic rendering instructions are converted into at least one of intermediate data represented by coordinate information and a PDL language.

Claims 49-52 (canceled).

53. (original) The image forming apparatus as defined in Claim 46, wherein the second output image is overwritten in the third output image.

54. (original) The image forming apparatus as claimed in Claim 51, wherein the first and second output image drawn with a rendering process based on at least one of a mono chrome, an RGB video color rendering, and a CMYK paint color rendering.

55. (new) The image forming apparatus of claim 1, wherein said portion of the first original image overlaid by the second original image is not rendered.